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(54) Hydraulic drive system

(57) A pump-motor unit (35) including a swashplate (95) having a neutral position (FIG. 3) and first and second displaced positions and comprising first (87) and second (89) pressure actuators associated with the swashplate. Displacement of the swashplate is proportional to substantially only the difference in fluid pressure between a high pressure source (41) and a low pressure source (39). The first pressure actuator includes a first control

piston (121) having a first effective area (A1), and the second pressure actuator includes a second control piston (127) having a second effective area (A2), the second effective area being at least somewhat greater than the first effective area. If the high and low pressure sources are at substantially the same pressure, the pressure acting on both of the first and second effective areas will displace the swashplate from neutral toward the second displaced position.

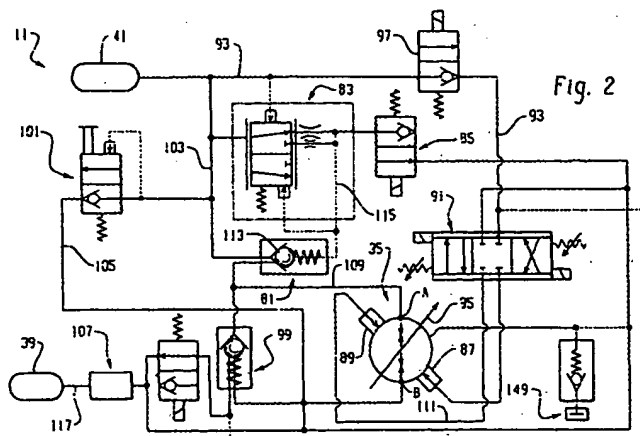


Fig. 2

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EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	GB 1 215 289 A (DAVID WILTON EVANS; EDWARD LARGE) 9 December 1970 (1970-12-09) * page 1, line 82 - page 3, line 23; figures 1,2 *	1-3	F16D31/02 B60K17/10
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			TECHNICAL FIELDS SEARCHED (IPC)
			F16D B60K B60T F15B
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 13 December 2005	Examiner Blumenberg, C
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